

REMARKS

Prior to the present paper, claims 68-87, 95 and 97-103 were pending. The Office Action rejected claims 68-87, 95 and 97-103. The Applicant has canceled claim 101 and amended claims 68-71, 73-84, 86, 87, 95, 97-100, 102, and 103. The Applicant respectfully requests reconsideration and allowance of the pending claims in light of the following.

I. Claim Rejections Under 35 U.S.C. §101

The Office Action rejected claims 68-87, 95, and 97-103 under 35 U.S.C. §101 because the claimed invention is purportedly directed to non-statutory subject matter. As noted above, the Applicant has canceled claim 101 and amended claims 68-71, 73-84, 86, 87, 95, 97-100, 102, and 103. Withdrawal of the present rejection in light of the following is earnestly solicited.

A. Claims 68-74, 79, 95, 97-100, 102, and 103

Each of claims 68-74, 79, 95, 97-100, 102, and 103, as amended, is clearly directed to either a system comprising one or more apparatus or an apparatus (e.g. the gaming machine of claim 79). Of note, none of claims 68-74, 79, 95, 97-100, 102, and 103 is directed to a "method" or a "process."

The Office Action reject each of claims 68-74, 79, 95, 97-100, 102, and 103 for failing to satisfy the "machine-or-transformation" test set forth in Bilski. Applicant respectfully submits that the Bilski Court clearly indicated that the "machine-or-transformation" test is used to determine whether a "method" or "process" claim is directed to patentable subject matter under 35 U.S.C. §101. The Bilski Court did not

use the "machine-or-transformation" test to assess whether an apparatus claim was directed to patentable subject, nor did the Bilski Court indicate that the "machine-or-transformation" test should be used to assess whether an apparatus claim is directed to patentable subject matter. Simply put, the "machine-or-transformation" test set forth in Bilski is not the appropriate test for assessing whether an apparatus or a system comprising one or more apparatus is directed to patentable subject matter under 35 U.S.C. §101.

In light of the present amendments which clearly specify that each of claims 68-74, 79, 95, 97-100, 102, and 103 is directed to an apparatus or a system comprising one or more apparatus, the Applicant respectfully requests reconsideration and withdrawal of the present rejection.

B. Claims 75-78

Each of claims 75-78 is directed to a method that comprises transmitting a verification algorithm from said external authentication agent apparatus to said gaming machine; deriving an outcome of said verification algorithm applied to the gaming software of the at least one digital storage medium by execution of the verification algorithm by said gaming machine; receiving with said authentication agent apparatus said outcome from said gaming machine; comparing with said authentication agent apparatus said outcome with an expected outcome; and authenticating said gaming machine with the authentication agent apparatus if said outcome matches said expected outcome.

Applicant respectfully submits that each of claims 75-78 satisfies at least one of the two prongs of the "machine-or-transformation" test as set forth in Bilski. As noted by the Bilski Court,

The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article.

Each of claims 75-78 as amended is tied in a meaningful way to an authentication agent apparatus and a gaming machine. In particular, each of claims 75-78 specify steps performed by the authentication agent apparatus and the gaming machine in a process to verify gaming software of at least one digital storage medium. As a result of such meaningful involvement of "particular" machines, each of claims 75-78 satisfies the "machine" prong of the "machine-or-transformation" test and is thus directed to patentable subject matter under 35 U.S.C. §101.

Furthermore, the method set forth in each of claims 75-78 further transforms the authentication agent apparatus and/or the gaming machine to a different state or thing. In particular, the methods of claims 75-78, among other things, transmit a verification algorithm to said gaming machine which executes the verification algorithm to derive the outcome of the verification algorithm applied to the gaming software of the digital storage medium. Applicant respectfully points out as a result the verification algorithm being transmitted to the gaming machine, the state of the gaming machine is changed to a gaming machine with such a verification algorithm.

Moreover, the methods of claims 75-78 further include authenticating said gaming machine with the authentication agent apparatus if said outcome received from

said gaming machine matches said expected outcome. The Applicant respectfully points out that such authentication changes the state of the gaming machine in the system from an unauthenticated gaming machine to an authenticated gaming machine. Thus, due to such transformations of the gaming machine and the system, the methods of claims 75-78 further satisfy the "transformation" prong of the "machine-or-transformation" test.

For one or more of the reasons discussed above, the Applicant respectfully requests the rejection of claims 75-78 be withdrawn.

C. Claims 80-87

Each of claims 80-87 is directed to a method that comprises, among other things, storing one or more program files for the at least one game in a digital storage medium; transmitting via a communication link a verification algorithm to said gaming machine from an authentication agent apparatus; processing said verification algorithm to derive an outcome of said one or more program files for the at least one game via said gaming machine; and presenting said at least one game to the player at the gaming machine if the one of more program files are determined to be authentic.

Again, the Applicant respectfully submits that each of claims 80-87 satisfy both prongs of the "machine-or-transformation" test even though satisfying a single prong is sufficient to establish patentable subject matter under 35 U.S.C. §101. In regard to the "machine" prong, the methods of claims 80-87 are tied in meaningful ways to an authentication agent apparatus and a gaming machine. As a result of being

meaningfully tied to at least one "machine", each of claims 80-87 satisfies the "machine-or-transformation" test and is therefore directed to patentable subject matter.

In regard to the "transformation" prong, the Applicant respectfully points out that the methods of claims 80-87 meaningfully transform the gaming machine. In particular, the methods of claims 80-87 include transmitting a verification algorithm to said gaming machine and processing the verification algorithm with said gaming machine. The Applicant respectfully points out that the state of the gaming machine is transformed as a result of transmitting the verification algorithm to the gaming machine and processing the verification algorithm with the gaming machine. The methods of claims 80-87 further include presenting said at least one game to the player at the gaming machine if the one or more program files are determined to be authentic. Again, the Applicant respectfully points out that such presenting transforms the gaming machine in a meaningful way.

Since each of claims 80-87 satisfies at least one prong of the "machine-or-transformation" test, each of claims 80-87 is directed to patentable subject matter under 35 U.S.C. §101. Withdrawal of the present rejection of claims 80-87 is respectfully requested.

II. Claim Rejections Under 35 U.S.C. §102 (Alcorn)

The Office Action rejected claim 68-87, 95, and 97-103 under U.S.C. §102(e) as being anticipated by U.S. 5,643,086 to Alcorn et al., hereinafter "Alcorn". The Applicant has canceled claim 101 and amended claims 68-71, 73-84, 86, 87, 95, 97-100, 102, and 103. The Applicant respectfully requests consideration of the following.

A. Claims 68-74

Each of claims 68-74 is directed to a system comprising a gaming machine and an authentication agent apparatus, wherein said authentication agent apparatus is external to said gaming machine and further wherein said authentication agent apparatus transmits a verification algorithm to said gaming machine, receives from said gaming machine an outcome of said verification algorithm applied to said gaming software, compares said received outcome with an expected outcome; and authenticates said gaming machine if said received outcome matches said expected outcome. The Applicant respectfully submits that Alcorn does not disclose such an authentication agent apparatus.

The Applicant has reviewed the Office Action in detail and in particular page 10 and 11 and respectfully submits that the Office Action appears to be filling "holes" in the teachings of Alcorn and/or stretching the teachings of Alcorn in a manner simply not taught. The Applicant respectfully submits that Alcorn generally teaches a two phase process: a game data set preparation phase and a game data set checking phase. The Applicant appreciates that Alcorn teaches that portions of the game data set preparation phase occur external to the casino game console. The Applicant further appreciates that Alcorn teaches that in some embodiments the game data sets may be stored on a mass storage device external to the casino game console. However, the Applicant respectfully submits that Alcorn teaches performing the game data set checking phase solely with the casino game console. As such, Alcorn does not teach an authentication agent apparatus that is external to the casino game console that transmits a verification algorithm to the casino game console, receives from the casino game console an

outcome of said verification algorithm applied to said game data set, compares said received outcome with an expected outcome, and authenticates the casino game console if said receive outcome matches an expected outcome.

Page 10 and 11 of the Office Action point to various aspects of Alcorn in an attempt to show that Alcorn teaches performing the game data set checking phase external to the casino game console. For example, the Office Action notes that the game data sets may be stored in a mass storage device accessed by the casino game console via a network. The Applicant respectfully points out that while such data sets may be stored externally, Alcorn only teaches authenticating the data sets with an authentication program stored in an unalterable ROM of the casino game console, and not a verification algorithm transmitted to the casino game console. See, e.g., column 2, lines 23-41.

The Office Action further cites column 4, lines 49-58 for the notion that the authentication can be conducted locally or externally via a network. In particular, column 4, lines 51-54 reads:

The authentication routine can also be run automatically on a periodic basis, or on demand – either locally by means of an operator switch mounted in the casino game console or remotely via a network.

The Applicant respectfully points out that the above portion does not teach running the authentication routine remotely as the Office Action submits. The above portion merely teaches that the authentication routine which is stored in the unalterable ROM 29 in the casino game console may be executed by the casino game console on a periodic basis or on demand. Moreover, the above portion teaches, that such a

demand of the casino game console may be made via an operator switch mounted in the casino game console or may be made remotely via a network. In other words, Alcorn teaches that the casino game console may receive a demand via a network and may execute the authentication routine of the unalterable ROM 29 in response to such a demand from the network. Alcorn simply does not teach executing the authentication routine remotely via a network as purported by the Office Action or transmitting a verification algorithm to and executed by the casino game console. Further details regarding the execution of the authentication routine on demand are provided at column 9, lines 27-58. The Applicant respectfully submits that such details of column 9, lines 27-58 make clear that only the demand is remotely generated via a network and that the casino game console and not a remote device performs the authentication by executing the authentication routine of the unalterable ROM 29.

The Office Action further cites column 8, lines 38-62 for the notion that an external authentication is used to authenticate the ROM 29 in the same manner as ROM 29 authenticates the mass storage unit and the rest of the contents of the gaming machine and such external authentication may be conducting by the gaming commission. Applicant respectfully points out that the ROM 29 does not include gaming software. As depicted in FIG. 2, the ROM 29 contents includes system init code, an authentication program, a random number generator program, and Part 1 of a loader program. As such, even if the external authentication were conducted upon the ROM 29 in the manner proposed by the Office Action, such external authentication would not authenticate the loadable data sets of the mass storage device which implement the games of the casino game console.

Applicant further points out that column 8, lines 39-54 merely address authenticating the contents of the ROM 29 and not the loadable data sets of the mass storage device. Moreover, column 8, lines 39-54 clearly specify that the authenticity of the ROM 29 "can be easily checked in the same way as that now performed by **prior art devices**: viz. computing the message digest directly from the ROM 29 and comparing the message digest thus computed with the custodial version of the message digest." (Emphasis Added). Applicant respectfully points out that Alcorn teaches that ROMs of prior art devices were authenticated by removing the ROM from the casino game console and checking the contents directly. See, Alcorn column 1, lines 38-60. Thus, Alcorn at column 8, lines 39-54 does not teach remotely authenticating the game data sets via a network as proffered by the Office Action, but merely authenticating the authentication program and other control programs of the ROM 29 by physically removing the ROM 29 from the casino game console in a manner similar to that used to authenticate ROMs of prior art devices.

The Office Action further cites column 9, lines 47-58 for the notion that the gaming machine would receive a verification algorithm from an external source and send it back to the external authentication agent. As discussed above, column 9, lines 47-58 merely indicate that a demand may be placed remotely via a network. However, in response to such remotely place demand, the casino game console executes the authentication routine stored in the unalterable ROM 29 and not a verification algorithm transmitted to casino game console.

Since Alcorn fails to teach one or more aspects of claims 68-74, Alcorn does not anticipate such claims. Withdrawal of the rejection of claims 68-74 is earnestly solicited.

B. Claims 75-78

Each of claims 75-78 is directed to a method that comprises, among other things, transmitting a verification algorithm from said external authentication agent apparatus to said gaming machine, and deriving an outcome of said verification algorithm applied to the gaming software of the at least one digital storage medium by execution of the verification algorithm by said gaming machine. The Applicant respectfully submits that the reasons present above in regard to claims 68-74 are generally applicable to the patentability of claims 75-78. Accordingly, the Applicant respectfully requests withdrawal of the present rejection of claims 75-78 for reasons similar to those presented above in regard to claims 68-74.

C. Claim 79

Claim 79 is directed to a game machine comprising, among other things, a gaming controller comprises an interface for loading data external from said gaming machine to said data storage device, and a processor to process a verification algorithm received via the interface to derive a verification signature and compare said derived signature to said valid signature. The Applicant respectfully submits that the reasons present above in regard to claims 68-74 are generally applicable to the patentability of claim 79. Accordingly, the Applicant respectfully requests withdrawal of the present rejection of claims 79 for reasons similar to those presented above in regard to claims 68-74.

D. Claims 80-87

Each of claims 80-87 is directed to a method that comprises, among other things, transmitting via a communication link a verification algorithm to said gaming machine from an authentication agent apparatus, and processing said verification algorithm to derive an outcome of said one or more program files for the at least one game via said gaming machine. The Applicant respectfully submits that the reasons present above in regard to claims 68-74 are generally applicable to the patentability of claims 80-87. Accordingly, the Applicant respectfully requests withdrawal of the present rejection of claims 80-87 for reasons similar to those presented above in regard to claims 68-74.

E. Claims 95, 97-100, 102, and 103

Each of claims 95, 97-100, 102, and 103 is directed to a system that comprises, among other things, and authentication agent apparatus is configured to transmit a

verification algorithm to said gaming machine, and receive from said gaming machine an outcome of said verification algorithm applied to at least said portion of said gaming machine. The Applicant respectfully submits that the reasons present above in regard to claims 68-74 are generally applicable to the patentability of claims 95, 97-100, 102, and 103. Accordingly, the Applicant respectfully requests withdrawal of the present rejection of claims 95, 97-100, 102, and 103 for reasons similar to those presented above in regard to claims 68-74.

III. Final Matters

The Office Action makes various statements regarding: the pending claims; the Alcorn reference; 35 U.S.C. §101 and 35 U.S.C. §102; and the state of the art that are now moot in view of the previously presented amendments and/or remarks. Thus, the Applicant has not addressed all of such statements at the present time. However, the Applicant expressly reserves the right to challenge any of such statements in the future should the need arise.

SUMMARY

The Applicant submits that the pending claims are in condition for allowance. The Applicant thus requests an expeditious notice of allowability with respect to all pending claims. If the Examiner disagrees, the Applicant requests an Examiner Interview to discuss the pending claims and the restriction/election requirement. The Applicant invites the Examiner to contact the undersigned at 312-238-8600 to arrange such an interview.

The Commissioner is hereby authorized to charge additional fees or credit overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

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Respectfully submitted,

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